UNITED STATES PATENT AND TRADEMARK OFFICE

NOTICE OF ALLOWANCE AND FEE(S) DUE

27820	7590	05/15/2009

WITHROW & TERRANOVA, P.L.L.C.
100 REGENCY FOREST DRIVE
SUITE 160
CARY, NC 27518

EXAMINER
NGUYEN, DUSTIN

ART UNIT	PAPER NUMBER
2454	

DATE MAILED: 05/15/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/741,517	12/19/2003	Thomas O'Rourke	7000-645	4432

TITLE OF INVENTION: COMPUTER TELEPHONE INTEGRATION OVER A NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	08/17/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: <u>Mail</u>

Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

27820   7590   05/15/2009

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CARY, NC 27518

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)

_____ (Signature)

_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/741,517	12/19/2003	Thomas O'Rourke	7000-645	4432

TITLE OF INVENTION: COMPUTER TELEPHONE INTEGRATION OVER A NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	08/17/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
NGUYEN, DUSTIN	2454	709-228000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE   (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (**Please first reapply any previously paid issue fee shown above**)

☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____   Date _____

Typed or printed name _____   Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/741,517	12/19/2003	Thomas O'Rourke	7000-645	4432

			EXAMINER

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NGUYEN, DUSTIN

ART UNIT	PAPER NUMBER
2454	

DATE MAILED: 05/15/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 823 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 823 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101   or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

	Application No.	Applicant(s)
Notice of Allowability	10/741,517	O'ROURKE ET AL.
	Examiner	Art Unit	
	DUSTIN NGUYEN	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _02/25/2009_.

2. ☒ The allowed claim(s) is/are _1-6, 8-18, 20, 23-27, now renumbered as 1-23_.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

            International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

/DUSTIN NGUYEN/ Primary Examiner, Art Unit 2454	05/11/2009

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicants' attorney, Mr. John R. Witcher, on 05/06/2009.

Please amend the claims as follows:

1. (Currently amended) A method of providing an interface over a network between a client computer and a server for controlling telephony equipment, comprising the steps of:

a) sending over the network to the client computer a first section of code including software elements which when loaded in web browser software enable a user of the client computer to issue commands to the server; and

b) formulating a second section of code as an open-ended stream of code which includes event notifications generated dynamically by the server in response to said telephony equipment, wherein at least some of the event notifications in the second section of code are adapted to update in the browser software one or more software elements received in the first section of code; ~~and~~

c) sending over the network to the client computer said second section of code as a

trickled stream of data which is encoded to be progressively and incrementally loaded by said

web browser software; and

d) sending over the network a third section of code, said third section of code including a

web services description of web services available on said server which enable remote control of

the telephony equipment,

whereby the first section of code provides a browser-based interface suitable for

transmitting user generated ~~events and~~ events, the second section of code provides a mechanism

for updating the browser with notifications of events provided by the telephony equipment, and

whereby the software elements from the first section of code operate in conjunction with the web

services description from the third section of code to enable the generation of appropriate

commands to access the web services offered by the server, and thereby to control the telephony

equipment.

7. (Cancelled).

8. (Currently Amended) A method as claimed in claim ~~7~~ 1, wherein the first and second sections

of code are transmitted as first and second frames in a web page, and the third section of code is

transmitted each time said web page is requested.

9. (Currently Amended) A method as claimed in claim ~~7~~ 1, further comprising monitoring said

network for commands from the client to operate the web services.

13. (Currently amended) A method of receiving an interface over a network from a server for

controlling telephony equipment, comprising the steps of:

a) receiving over the network a first section of code including software elements which

when loaded in web browser software enable a user of the browser software to issue commands

to the server; ~~and~~

b) receiving over the network a second section of code as an open-ended stream which

includes event notifications generated dynamically by the server in response to said telephony

equipment, wherein at least some of the event notifications in the second section of code are

adapted to update in the browser software one or more software elements received in the first

section of code, wherein said second section of code is received as a trickled stream of data

which is encoded to be progressively and incrementally loaded by said web browser software;

and

c) receiving over the network a third section of code, said third section of code including

a web services description of web services available on said server which enable remote control

of the telephony equipment,

whereby the first section of code provides a browser-based interface suitable for

transmitting user generated ~~events and~~ events, the second section of code provides a mechanism

for updating the browser with notifications of events provided by the telephony equipment, and

whereby the software elements from the first section of code operate in conjunction with the web

services description from the third section of code to enable the generation of appropriate

commands to access the web services offered by the server, and thereby to control the telephony

equipment.

19. (Cancelled).

20. (Currently Amended) A method as claimed in claim ~~19~~ 13, further comprising sending to the

server commands to operate the web services in response to user actions in the browser.

23. (Currently amended) Apparatus for providing an interface over a network between a client

computer and a server for controlling telephony equipment, comprising:

a) memory;

b) ~~a)~~ a first code generator for generating a first section of code including software

elements which when loaded in web browser software enable a user of the client computer to

issue communications control commands to the server;

~~b)~~ c) a second code generator for generating a second section of code as an open-ended

stream, said second code generator being in direct or indirect communication with said telephony

equipment and being configured to generate event notifications in response thereto, wherein at

least some of the event notifications in the second section of code are adapted to update in the

browser software one or more software elements received in the first section of code, said second

code generator being configured to transmit said second section of code as a trickled stream of

data which is encoded to be progressively and incrementally loaded by said web browser

software; and

    d) a third code generator for generating a third section of code, said third section of code

including a web services description of web services available on said server which enable

remote control of the telephony equipment,

    whereby the first section of code provides a browser-based interface suitable for

transmitting user generated ~~events and~~ events, the second section of code provides a mechanism

for updating the browser with notifications of events provided by the telephony equipment, and

whereby the software elements from the first section of code operate in conjunction with the web

services description from the third section of code to enable the generation of appropriate

commands to access the web services offered by the server, and thereby to control the telephony

equipment.

24. (Currently amended) A computer including a memory storing a web page, and a processor

executing web browser software which displays said web page, wherein said web page

comprises at least two frames, wherein one of said frames is a hidden frame generated as an

open-ended stream of dynamically generated code encoded to be progressively and

incrementally transmitted to ~~said~~ a client as a trickled stream of data in response to event

notifications from a computer telephone integration application and the other of said frames is a

visible frame adapted to be modified within a browser in response to particular events received

in the open-ended stream of dynamically generated code and including web page elements

enabling a user to issue commands to said computer telephone integration application, whereby

the open-ended stream of dynamically generated code includes a section of code which includes

a web services description of web services available to said user which enables remote control of

the computer telephone integration application, whereby the open-ended stream of dynamically

generated code operates to enable the generation of appropriate commands to access the web

services available to said user, and thereby to control the computer telephone integration

application.

25. (Currently amended) A computer network including a client and a server connected across

the network, wherein:

the server comprises:

a) a first code generator for generating a first section of code including software

elements which when loaded in web browser software enable a user of the client computer to

issue communications commands to the server; ~~and~~

b) a second code generator for generating a second section of code as an

open-ended stream, said second code generator being in direct or indirect

communication with said telephony equipment and being configured to generate

event notifications in response thereto, wherein at least some of the event

notifications in the second section of code are adapted to update in the browser

software one or more software elements received in the first section of code,

said second code generator being configured to transmit said second section of

code as a trickled stream of data which is encoded to be progressively and

incrementally loaded by said web browser software; and

c) a third code generator for generating a third section of code, said third section of code

including a web services description of web services available on said server which enable

remote control of the telephony equipment,

the client comprises:

a memory storing a web page, and a processor executing web browser software which

displays said web page, wherein said web page comprises at least two frames, wherein one of

said frames is a hidden frame generated from said second section of code, and the other of said

frames is a visible frame generated from said first section of code,

whereby the first section of code provides a browser-based interface suitable for

transmitting user generated ~~events and~~ events, the second section of code provides a mechanism

for updating the browser with notifications of events provided by the telephony equipment, and

whereby the software elements from the first section of code operate in conjunction with the web

services description from the third section of code to enable the generation of appropriate

commands to access the web services offered by the server, and thereby to control the telephony

equipment.

26. (Currently amended) A computer program product comprising a ~~computer-readable~~

computer storage medium encoded with instructions which, when executed on a server having

control of telephony equipment, are effective to cause the server to:

a) send over the network to the client computer a first section of code including software elements which when loaded in web browser software enable a user of the client computer to issue commands to the server; ~~and~~

b) formulate a second section of code as an open-ended stream which includes event notifications generated dynamically by the server in response to said telephony equipment, wherein at least some of the event notifications in the second section of code are adapted to update in the browser software one or more software elements received in the first section of code; ~~and~~

c) send over the network to the client computer said second section of code as a trickled stream of data which is encoded to be progressively and incrementally loaded by said web browser software; <u>and</u>

<u>d) send over the network to the client computer a third code generator which includes a web services description of web services available on said server which enable remote control of the telephony equipment,</u>

whereby the first section of code provides a browser-based interface suitable for transmitting user generated ~~events and~~ <u>events,</u> the second section of code provides a mechanism for updating the browser with notifications of events provided by the telephony equipment<u>, and whereby the software elements from the first section of code operate in conjunction with the web services description from the third section of code to enable the generation of appropriate commands to access the web services offered by the server, and thereby to control the telephony equipment.</u>

27. (Currently amended) A computer program product comprising a ~~computer-readable~~

computer storage medium encoded with instructions which, when executed on a computer

connected to a network are effective to cause the computer to:

a) receive over the network a first section of code including software elements which

when loaded in web browser software enable a user of the browser software to issue commands

to the server; ~~and~~

b) receive over the network a second section of code as an open-ended stream which

includes event notifications generated dynamically by the server in response to said telephony

equipment, wherein at least some of the event notifications in the second section of code are

adapted to update in the browser software one or more software elements received in the first

section of code, wherein said second section of code is received as a trickled stream of data

which is encoded to be progressively and incrementally loaded by said web browser software;

and

c) send over the network a third code generator which includes a web services description

of web services available on said server which enable remote control of the telephony

equipment,

whereby the first section of code provides a browser-based interface suitable for

transmitting user generated ~~events and~~ events, the second section of code provides a mechanism

for updating the browser with notifications of events provided by the telephony equipment, and

whereby the software elements from the first section of code operate in conjunction with the web

services description from the third section of code to enable the generation of appropriate

commands to access the web services offered by the server, and thereby to control the telephony

equipment.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DUSTIN NGUYEN whose telephone number is

(571)272-3971. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nathan Flynn can be reached on 571-272-1519. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DUSTIN NGUYEN/
Primary Examiner, Art Unit 2454